

**United States Department of Agriculture
Animal and Plant Health Inspection Service
Center for Veterinary Biologics
P. O. Box 844
Ames, IA 50010**

1. **Reagent Name:** *Salmonella typhimurium* Challenge Culture
2. **Strain or Source:** APHIS, NVSL #102
3. **Lot Number:** IRP STC Serial #6
4. **Fill Date:** April 1999
5. **Expiration Date:** Not applicable.

Precautions: This reagent is a potential human pathogen. It is suggested that this reagent be handled under a biological safety hood while wearing gloves.

6. **Intended Use:** Challenge material for potency testing of *S. typhimurium* bacterins according to 9 CFR 113.120 and **SAM 631**.
7. **Instructions for Use:** Rehydrate with 1.0 mL tryptose broth. Inoculate 0.5 mL of culture into 10.0 mL of brain heart infusion broth and incubate 16-20 hr at 35°- 37°C. Adjust the density of the culture to 57-61%T at 620 nm using a Spectronic 20 Spectrophotometer. The recommended mouse dose is 0.25 mL of a 10⁻¹ dilution of the standardized culture, administered intraperitoneally.
8. **Test of Reagent:** The mouse LD₅₀ of the standardized culture was 10^{-6.28} using Harlan Sprague Dawley CF-1 (colony 217) mice and 10^{-6.7} using Sasco CF-1 mice. Gram stain and biochemical characteristics of the culture were consistent with *S. typhimurium*. Purity testing was satisfactory according to 9 CFR 113.27b.
9. **Container Size, Type, Weight, or Volume:** 2.0 mL of lyophilized culture in 2-mL borosilicate vials.
10. **Storage Conditions:** 2°- 7°C or lower
11. **CVB Technical Contact:** Bacteriology Section, Center for Veterinary Biologics, (515) 337-6140 or FAX (515) 337-7673.
12. **Origin and Passage History:** Origin: APHIS, NVSL, Accession No. 102. No passage history is available.

13. Method of Preparation: Stock culture was rehydrated and grown on beef infusion agar. Growth was harvested with 0.85% saline, mixed with an equal volume of sucrose mono-potassium glutamate stabilizer, and lyophilized.

14. Other:

Restrictions: For use in potency testing of *S. typhimurium* biologicals.

Reagent orders and feedback should be sent *including phone number* to the following email address: CVB@aphis.usda.gov.

Reagent orders forms (APHIS 2018) are available from:
http://www.aphis.usda.gov/animalhealth/cvb_forms.

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